| | FI | ight-Testing Newto | n's Laws |
|--------------------|--------|--------------------|---|
| | | 1997 Mathemat | tics |
| | | Content Standa | ırds |
| California Mathema | | | |
| Grades 8-12 (Algeb | ora I) | | |
| Activity/Lesson | State | Standards | |
| | | | Students apply algebraic techniques to solve rate problems, work problems, and percent |
| Session-10 (1-5) | CA | MA.8-12.AI.15.0 | mixture problems. |
| | | | Students apply quadratic equations to physical problems, such as the motion of an object under |
| Session-10 (1-5) | CA | MA.8-12.AI.23.0 | the force of gravity. |
| | | | Given a specific algebraic statement involving linear, quadratic, or absolute value expressions or equations or inequalities, students determine whether the statement is true sometimes, |
| Session-10 (1-5) | CA | MA.8-12.AI.25.3 | always, or never. |
| | | | |
| | FI | ight-Testing Newto | |
| | | 1997 Mathemat | |
| 0 115 1 14 (1 | 4* | Content Standa | Iras T |
| California Mathema | | | |
| Grades 8-12 (Mathe | | 04 | |
| Activity/Lesson | State | Standards | |
| Session-10 (1-5) | CA | MA.8-12.MA.3.0 | Students can give proofs of various formulas by using the technique of mathematical induction. |
| Session-1 (1-17) | CA | MA.8-12.MA.3.0 | Students can give proofs of various formulas by using the technique of mathematical induction. |
| | FI | ight-Testing Newto | n's I aws |
| | | 1997 Mathemat | |
| | | Content Standa | |
| California Mathema | ation | Content Staffua | ii u 3 |
| | | | |
| Grades 8-12 (Calcu | | Standards | |
| Activity/Lesson | State | Stanuarus | Ctudente demonstrate en understanding of the |
| | | | Students demonstrate an understanding of the derivative of a function as the slope of the |
| Session-8 (1-9) | CA | MA.8-12.C.4.1 | tangent line to the graph of the function. |
| | | | Students demonstrate an understanding of the interpretation of the derivative as an instantaneous rate of change. Students can use derivatives to solve a variety of problems from physics, chemistry, economics, and so forth that |
| Session-8 (1-9) | CA | MA.8-12.C.4.2 | involve the rate of change of a function. Students derive derivative formulas and use them to find the derivatives of algebraic, |
| Session-8 (1-9) | CA | MA.8-12.C.4.4 | trigonometric, inverse trigonometric, exponential, and logarithmic functions. |